

Indian Health Service
Injury Prevention Specialist
Epidemiology Fellowship

Class of 2010
Application Packet

U.S. Department of Health and Human Services
Public Health Service
Indian Health Service

August 17, 2009



IHS Injury Prevention Class of 2010

Epidemiology Fellowship

Overview

What is the Epidemiology Fellowship?

The Epidemiology Fellowship is a 12-month advanced learning experience for individuals promoting injury prevention in American Indian/Alaska Native communities.

What will participants gain from the Epidemiology Fellowship?

- Completion of a project that will help reduce injuries in your community
- Enhanced skills in injury epidemiology and program evaluation, such as:
 - Designing a study
 - Data collection and analysis
 - Promoting community involvement
 - Reviewing the literature
- “Best practices” for prevention of intentional and unintentional injuries
- Enhanced skills in presenting scientific information
- College credits from the University of Michigan Summer Epidemiology courses
- Improved effectiveness and satisfaction in your injury prevention work
- Individualized learning experiences
- All travel and training expenses provided for qualified participants

What is the Epidemiology Fellowship curriculum?

- Faculty and local mentors to assist you in conducting your year-long project
- Academic sessions:
 - Injury prevention project development: Rockville, MD; May 3-7, 2010
 - University of Michigan Summer Epidemiology Courses, Ann Arbor: July 11-30, 2010 (3 weeks)
 - Injury prevention field work: October 2010 (one week). Location to be determined.
 - Scientific presentation skills: Albuquerque: February 2011 (one week)
 - Symposium: May 2011 (2 days)

Who should apply?

Persons who have:

- Worked at least 2 years in the area of injury prevention, broadly defined;
- Attended at least two IHS injury prevention core courses (Levels 1,2,3) or equivalent;
- At least 3 years experience in public health;
- A Bachelor's or higher degree. (Graduates of Fellowship Classes 2008 or 2009 are not be eligible to apply for the Class of 2010.)

Applications must be received via hard copy mail, fax, or preferably email, by Nancy Bill by 5 PM on **December 1, 2009**. Acceptances will be announced by January 15, 2010.

More information? Please visit

<http://www.ihs.gov/MedicalPrograms/InjuryPrevention/index.cfm?module=Fellowship>

Online information packet:

For questions, please contact Nancy Bill, MPH, IHS Injury Prevention Program Manager, OEHE-EHS-TMP 610, 801 Thompson Ave, Suite 120, Rockville, MD 20852. Phone: 301-443-0105; Fax: 301-443-7538; email: nancy.bill@ihs.gov

A. The Two IHS Fellowship Programs

The Epidemiology Fellowship provides practical knowledge and skills for injury prevention practitioners in American Indian and Alaska Native communities. Building on the IHS Injury Prevention Program Short Courses and the prior experiences of the participants, the Fellowship offers advanced training in injury epidemiology, program evaluation, scientific presentation skills, and field work. Fellows apply this training by working on individual projects involving data collection and/or program implementation and evaluation.

The Epidemiology Fellowship differs from the Program Development Fellowship option by focusing primarily on injury epidemiology. While the two Fellowships have a similar structure, the content of the courses, projects, and participant pre-requisites differ (Table 1).

Table 1
Comparison of Injury Prevention Fellowship Options

	<i>Epidemiology Option: Class of 2010</i>	<i>Program Development Option: Class of 2011</i>
<i>Focus</i>	1. Evaluation/Surveillance/Data Collection 2. Community interventions	1. Community interventions 2. Evaluation/Surveillance/Data Collection
<i>Education Prerequisites</i>	Bachelor's Degree	No bachelor's degree required
<i>Training Prerequisites</i>	Introduction to IP (Level 1), Intermediate IP (Level 2), or equivalent.	Introduction to IP (Level 1) or equivalent.
<i>Field Experience Prerequisites</i>	3 years in public health, 2 years in injury prevention	1 year in injury prevention
<i>Long Distance Travel / Time Away from Home</i>	6 weeks + presentation (2 days)	4 weeks + presentation (2 days)
<i>Curriculum</i>	<ul style="list-style-type: none">• 4.5 days: IP Project Development• 3 weeks: Epidemiology summer institute, U. Michigan• 4.5 days: Field Course• 4 days: Presentations and publication• 2 days: Symposium <p><i>Please see Appendix 1 for details.</i></p>	<ul style="list-style-type: none">• 4.5 days: Injury Prevention Program Planning• 4.5 days: Program Implementation and Evaluation• 4.5 days: Field Course• 4.5 days: Marketing and Advocacy• 2 days: Symposium Presentation

B. Goal of the Epidemiology Fellowship: To provide advanced, relevant training for injury prevention practitioners.

All fellowship participants will be able to:

- Complete a project that will have an impact on injuries in their community
- Describe effective strategies for injury control in the areas of motor vehicle crashes, falls, intimate partner violence, fires, child abuse, firearms, and suicide
- Design data collection forms
- Analyze and interpret injury data
- Design an evaluation of an IP intervention or existing program
- Present the results of a study at a scientific meeting

Participants can also choose to learn specific skills, such as:

- Use a GPS device to create a map of injury sites.
- Write a grant proposal
- Design and conduct observational surveys (e.g., seat belt and child safety seat use, home surveys)
- Create an injury surveillance system

C. Pre-requisites

Applicants to the Fellowship may be employed by tribes, tribal organizations, or the Indian Health Service. Arrangements can also be made to accept Fellows from other agencies. Examples from previous classes: Oklahoma Department of Health, Urban Indian Research Institute, US Coast Guard, NIOSH. Nominations for participation received from tribes who have compacted under the Self-Governance provisions of Public Law 93-638 will be considered along with nominations from non-compacting tribes.

All of the following must be completed or obtained by the time of application:

1. A Bachelor's or higher degree.
2. At least 3 years experience in public health;
3. At least 2 years experience working in injury prevention activities.
4. Completion of the IHS Introduction to Injury Prevention (Level I) Course. An equivalent course (e.g., the one-week injury prevention overview course at Johns Hopkins) is acceptable.
5. Completion of either the Intermediate or Advanced IHS Injury Prevention courses (Levels II or III), or equivalent coursework.

NOTE: Please contact your IHS Area Injury Prevention Specialist to find out when core courses are offered. Area IP Specialists are listed at www.ihs.gov/MedicalPrograms/InjuryPrevention (click on "Contacts")

D. Fellowship Projects

Fellowship participants are required to complete a special study related to some aspect of the injury problem among American Indians/Alaska Natives. Each Fellow is encouraged to select a topic of special interest to her or him before the Fellowship is begun, **in consultation with their supervisor and the Area IP Specialist**. Please submit a project form with your application (page 8). Projects may focus on epidemiology, program implementation, or program evaluation. Please see Appendix 2 for examples of project ideas. Abstracts of studies by former Fellowship

participants can be viewed at www.injuryfellowship.org (click on “Compendium of projects”). Some funding may be available for projects from IHS Area Injury Specialists. Please discuss funding opportunities with them directly.

E. Presentations

Presentations of the results of the Fellows’ studies will be given in May or June 2011 at a location to be determined. The February 2011 course includes sessions on preparing presentations. The Fellows’ presentations are given at the IHS Injury Prevention Specialist Fellowship Symposium before a gathering of IHS staff, injury prevention program consultants, and other guests. Each presentation is 15 minutes, including questions.

F. Mentors

Each Fellow will have both a faculty and local “mentor.” Both these individuals will be available throughout the year to assist the Fellow in fulfilling their learning objectives and completing their injury prevention project. The local mentor can be an IHS Injury Prevention Specialist or a community member with experience or special expertise in the Fellow’s project topic approved by the Academic Director (Dr. Larry Berger). The mentor’s role is to assist the Fellow in developing a topic and study project outline, establishing timelines, meeting deadlines, and providing guidance in the design, implementation, and evaluation of the research project.

G. Time commitment

On average during the year, the Fellow’s project requires 5-10 hours per week. In addition, Fellows will be attending courses away from their job sites for a total of about 6-1/2 weeks during the year. Appendix 1 shows a summary of the courses.

H. Financial support

IHS Area Offices will provide the funding for Fellowship participants’ travel, per diem, and tuition for required course work, with the exception of participants from self-governance compact tribes that have taken their training shares from IHS. These tribes are responsible for paying all travel, per diem, and tuition expenses for their Fellowship participants. Financial arrangements for candidates from non-IHS agencies can be discussed on a case-by-case basis.

I. Letters of interest and support

1. **Letter of interest from the applicant.** Your letter of interest should state:
 - a. Why you want to take the fellowship: why you believe this advanced training is important to you, your job, and your community; what you want to accomplish; how you might use this training in the future.
 - b. Your willingness and ability to participate in all components of the program (completing your project, attending all courses). The fellowship requires 5-10 hours per week of work related to your project and at-home activities, in addition to the 6-1/2 weeks from work to attend courses and give your presentation.
 - c. Your previous courses and training in injury prevention: names of courses and years of completion. Examples are the IHS core Injury Prevention courses (Introduction to IP, Intermediate IP, Advanced IP), IHS Injury Prevention Program Development Fellowship, and workshops for grant-writing, NHTSA child passenger safety, and IHS Tribal IP Cooperative Agreements Program training.

- d. Your experience in injury prevention, including community or clinic-based injury prevention: description of activities, amount of time, when (years).
2. **Letter of support from the IHS Area IP Specialist.** The letter should discuss the applicant's qualifications and ability to complete the Fellowship work, including completion of an individual project. The letter should state that the Specialist supports your applying to the Fellowship; supports your project idea; and will be available to assist you in working on your project.
3. **Letter of support from the applicant's supervisor.** The letter should state why the applicant is a good candidate for the fellowship and why the training will be of value. The supervisor needs to **state that she or he knows the time commitment involved (6 weeks + 2 days time away for courses, 5-10 hours per week for project activities) and will allow the applicant to fully participate in all components of the fellowship.** Letters for applicants from compacted tribes that have obtained their training shares from IHS should agree to bear the expenses associated with the Fellowship program.

J. Timeline

- *December 1, 2009:* Complete applications due
- *January 15, 2010:* Program participants notified
- *May 3-7, 2010:* First course in Rockville.

K. Online Application Packet:

<http://www.ihs.gov/MedicalPrograms/InjuryPrevention/index.cfm?module=Fellowship>
Click on "News and Announcements".

L. Contact information:

Nancy Bill, MPH
IHS Injury Prevention Program Manager
OEHE-EHS-TMP 610
801 Thompson Ave, Suite 120
Rockville, MD 20852
Phone: 301-443-0105; Fax: 301-443-7538; email: nancy.bill@ihs.gov

Appendix 1

Class of 2010 Epidemiology Fellowship Course Summary

Pre-course 1: January – May 2010

1. Identify personal learning objectives.
2. Explore project options with the Area IP Specialist and others.

A. Injury Prevention Project Development: May 3-7, 2010, Rockville, Maryland

This course focuses on the design of quantitative injury prevention projects, including a review of epidemiologic approaches, ethical issues in data collection and publication, and conducting a literature review.

Learning Outcomes:

- Create a project plan that outlines hypotheses and study questions, methods, necessary approvals, and a project timeline. Identify resource persons; assign mentors.
- Conduct a preliminary literature review using the Internet.
- Describe similarities and differences between individual- and community-based institutional reviews of proposed projects.
- Overview of key concepts.
- Identify the process of approvals for individual tribes and the IHS.
- Review Fellows' learning objectives.

B. Graduate Summer Session in Epidemiology: July 11-30, 2010, University of Michigan, Ann Arbor, MI.

Fellows will attend four courses offered during the 3-week Summer Session in Epidemiology at the University of Michigan. Examples of relevant courses are “Epidemiology of Injury and Violence”, “Epidemiology in Public Health Practice”, “Public Health Surveillance”, “Geographic Information Systems for Epidemiology,” “Social Epidemiology”, “Successful Scientific Writing,” “Planning, Delivery, and Evaluation of Community Based Interventions for Behavioral and Social Change” and “Principles and Applications of Epi Info.”

Graduate credit is awarded.

Learning Outcomes:

- Identify the primary risk factors and vulnerable populations for leading causes of injury deaths among Native Americans.
- Describe the process of conducting an epidemiological investigation of an injury problem in a community.

C. Field Course: September or October, 2010: Location to be determined.

This course is designed to enhance skills in conducting field work in injury prevention. Fellows work in teams to address issues identified by the host Tribal Nation and IHS Area staff. Findings and recommendations will be presented to Tribal leaders and IHS Area staff at the conclusion of course.

Learning Outcomes:

- Describe major injury issues facing the host Area.
- Use digital photography to document injury hazards and programs.
- List the steps in organizing and conducting a focus group.
- Prepare and administer a structured questionnaire for key informant interviews.

- Describe the usefulness and challenges of working within a team with a fixed deadline.
- Prepare a group presentation and written report for Tribal members.
- Review individual projects.

D. Oral and written presentations, marketing, and resource development: February 2011, Albuquerque, NM

This course is designed to enhance skills in oral presentations and report/article writing; identifying and applying for funding; and marketing injury prevention programs in communities.

Learning Outcomes:

- Create a written project abstract suitable for submission to conferences and publications
- Prepare an oral presentation using PowerPoint
- Identify the steps in submitting an article for publication
- Locate sources of funding for injury prevention projects
- Identify common errors in proposal-writing
- Explain the difference between internal and external marketing of programs
- Review individual projects.

E. Fellowship Symposium: May 2011, Rockville, MD

During this 2-day session, Class of 2010 Fellows present their year-long projects before IHS headquarters and Area staff, and Tribal leaders. They also participate in a symposium practice session, where their presentations will be constructively critiqued by their peers and IHS staff; and visit national agencies and organizations whose focus is injury prevention.

Learning Outcomes:

- Identify strengths and weaknesses in oral scientific presentations.
- Present a 12-minute summary of their year-long injury prevention projects before a national audience.
- Describe the mission, goals, and objectives of at least two national-level injury prevention programs.

Appendix 2

Examples of Project Topics

Projects may emphasize data collection and analysis (epidemiology, surveillance, cost data) or community interventions. They may focus on intentional or unintentional injuries or both. Here are some project ideas to consider as a jumping off point for discussion with your Area Specialists:

A. Epidemiology, surveillance, cost data:

1. Speed reduction: What are “best practices” nationally? Which are most effective for rural communities? How might you design, implement, and evaluate a program for a tribal community? How well do radar guns, radar signs (show speeds of approaching cars), speed cameras, rumble strips, and other approaches work in the short- and long-term?

2. Falls from pickups: At some Tribes, more than half of family vehicles are pick-up trucks. What are the circumstances of injuries resulting from falls from these trucks? What are the ages (need observational data for denominators), position in the cargo area, times of year, purpose of trips, configuration of the cargo areas (carrying water tanks? empty?) when injuries occur?

3. Economics:

a. Cost burden of injuries. Compacted vs. non-compacted Tribes.

b. CHEF: "Catastrophic health emergency fund": Suggested by Kenny Hicks:

http://www.law.cornell.edu/uscode/25/uscode_sec_25_00001683----000-.html

What the status of CHEF is today? How have the funds been used (i.e., what proportion were expended for long-term care of injuries)? See also IHS Publications: IHS Manual: Part 2 - SERVICES TO INDIANS AND OTHERS - CHAPTER 2- CONTRACT HEALTH SERVICES – CHEF, CHS

4. Assaults: Data on assaults is often very incomplete and inaccurate, for many reasons. Your project would be to track down how the data was collected, what denominators are used, what proportion of tribal police departments report crime statistics to the national data center (perhaps by doing a mail or email survey of police chiefs), etc. This would be an epidemiology project, involving surveillance techniques, case definitions, validity of numerator and denominator data.

5. Severe injury surveillance: Injury researcher Leon Robertson helped IHS create an injury surveillance approach. How well is working? How might it be improved? How might innovations such as the electronic health record impact surveillance protocols? How can severe, but non-hospitalized injuries (e.g., from intimate partner violence, suicide attempts) be captured? How might contract health data be incorporated?

6. Diabetes and injuries: How can RPMS be improved to incorporate information on screening for early diagnosis of sensory nerve loss (peripheral neuropathy, a risk factor for falls and burns) and outcomes such as amputation and injuries? People with diabetes are at increased risk for injuries. Eye problems, impaired mobility, and decreased sensation are 3 risk factors for falls, burns, and other injuries. A case-control study would help identify specific hazards; a cohort study could identify high-risk groups.

7. CQI and the Area IP Programs: work with Area IP Specialist to build on the UNC Area

Evaluation, designing a CQI approach that might be replicated at other Areas in the future.

8. Intentional injury data: What are existing data sources? How reliable and complete are they? How can data collection be improved?

9. Intimate partner violence: What data are available to access the extent of IPV in AIAN communities? Possible data sources: police and medical records, ER logs, EMS run logs, social services/behavioral health/mental health contacts, RPMS, RCIS, shelter logs.

10. Contract care: IHS spends millions of dollars each year on contract care. Which Areas receive E-codes and cost information about injuries from contract care facilities? Why don't all areas? What could be done to make E-code and cost information a requirement for payment?

11. Law enforcement: How can we measure the intensity of enforcement of traffic laws, such as regarding DUI, speeding, belt use? Are the numbers of citations issued per total population the best measure? What might be other approaches? How does one track DUI arrests through the tribal justice system, from arrest, to court, to conviction rates, fines, and other penalties? Status of laws/police training and staffing/judges and courts in Indian country

12. Law enforcement: What are unique challenges and opportunities of tribal police agencies? Jurisdictional issues? Funding?

13. There is no repository of information on Tribal codes. It would be very helpful to survey Tribes to discover what codes exist regarding such injury-related codes as (Don Williams):

- a. DWI: first and subsequent offenses
- b. Alcohol sales on reservation land (wet/dry/other)
- c. Seat belts and car safety seats
- d. Fire safety for housing

14. Suicide prevention: What data is there for suicide attempt rates in AIAN communities? How well are the EHR, GPRA, etc. improving suicide data?

15. Substance abuse and injuries: Have brief interventions for abusers of alcohol and other substances been evaluated in AI/AN settings? What are the recommended best practices for substance abuse treatment, and how well are they being implemented in AIAN communities? What are barriers to their implementation and how may they be addressed? Beyond alcohol use, what epidemiologic data suggests an association between substance and injuries?

16. Intentional injury data: What are the major data sources nationally? What are potential opportunities and problems with regard to AI/AN populations in these data sets? What recommendations for improvement or priority studies?

17. GPS and mapping:

- a. Smoke alarms and fires
- b. Dog bites
- c. Place of residence of DUI arrestees. Are there communities with higher rates of DUI offenders? Are these communities characterized by high numbers of bars or low SES or other variables? Could use census data to look at possible associated variables.

d. Place of residence of individuals transported by EMS services by cause (injury, illness, non-urgent transport). Could help target areas for increased CHR visits, placement of EMS staff/vehicles, sites to investigate possible preventive interventions.

Community interventions:

1. DWI: Where did motor vehicle injury victims (or DWI offenders) get their alcohol? Beer purchases at a package store off-reservation? Bootlegged wine? Bars? What recommendations for control might result from this information?

2. DWI: What alternatives to jail might be feasible for DWI offenders? Would the ignition interlock approach be a feasible one? New Mexico just passed a law on ignition locks, including funding for low-income DWI offenders. What are the costs, political issues, and community acceptability issues? What might focus groups suggest?

3. DWI: Victim Impact Panels (VIP) have mixed results in reducing repeat DWI. Could the VIP concept be expanded by 1) having offenders sign a contract with victims regarding treatment, rehabilitation and/or 2) having one or more follow-up meetings (say in 6 or 12 months) to see if the offender has changed anything?

4. Advocacy: What is the process for getting new regulations or programs approved by the Tribal Council in your community? What are the official procedures and the unofficial considerations? Can you apply what you learn by trying to pass an injury-prevention-related resolution or regulation?

5. Diabetes and injuries: People with diabetes are at increased risk for injuries. Eye problems, impaired mobility, and decreased sensation are 3 risk factors for falls, burns, and other injuries. How can injury control efforts be incorporated into on-going programs for people with diabetes? A case-control study would help identify specific hazards.

6. Distance learning: What are the distance learning opportunities in injury prevention and how can we best assess them for the fellowship? What would graduates of the fellowship program recommend?

7. Justice and law enforcement: Status of laws/police training and staffing/judges and courts in Indian country.

8. Child maltreatment: What would be a comprehensive model for prevention, identification, and treatment of child abuse and neglect? What components of this model are working in your community and which are not? What would be recommendations for improvement?

9. Child maltreatment: Johns Hopkins has a home visiting program for teen parents in Whiteriver and the Navajo Nation. How well has this program worked? How can it be generalized to other communities?

10. ASBI: The IHS has promoted Alcohol Screening and Brief Intervention (ASBI) as a way of reducing substance abuse and subsequent injuries. To what extent has the program been implemented by IHS providers? How effective has it been?

11. Elder abuse and neglect. How extensive is it among American Indian/Alaska Native communities? What are “best practices” for prevention and intervention? Model programs?
12. Sexual assault. How extensive is it among American Indian/Alaska Native communities? What are “best practices” for prevention and intervention?
13. Violence prevention: What are “best practices” nationally? How extensively have they been implemented in AI/AN communities?
14. Alternative sentencing: With jails crowded, and much poverty, in many tribal communities, what other options are there for sentencing individuals who violate laws, e.g., drunk driving?
15. Budget formulation process: Injuries are sometimes not even listed as in the top ten priorities of IHS Areas. What is the process in your area? Who are the participants? How do they set their priorities - data? Personal experience?
16. This is no repository of information on Tribal codes. It would be very helpful to survey Tribes to discover what codes exist regarding such injury-related codes as (Don Williams):
- a. DWI: first and subsequent offenses
 - b. Alcohol sales on reservation land (wet/dry/other)
 - c. Seat belts and car safety seats
 - d. Fire safety for housing

Class of 2010 Fellowship Project Proposal Form

Please prepare a separate form for each topic you are considering for your project.

Name of Fellow: _____ Area: _____

1. Project title:

2. Purpose of the study: What do you want to accomplish by conducting this project? What is the main study question or hypothesis?

3. Why the topic is important, why you chose the topic:

4. What methods will you use to conduct your study?

5. With whom has this project been discussed?

a. No one yet

b. Area IP specialist: Name: _____

c. Other key informants: state names and titles:

6. Is Tribal approval necessary? Not sure ____ Yes ____ No, not needed (explain):

7. If you done any previous work on this topic, please describe what you've done:

8. Who might serve as the local project mentor?

IHS Area IP Specialist (name) _____

Other person (name, title): _____

9. I have reviewed this outline:

Signature of Area IP Specialist: _____

Date _____

**IHS Injury Prevention
Epidemiology Fellowship 2010
Application Cover Form**

Name: _____

Position: _____

Tribe/Organization/Agency: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Telephone: () _____ Fax: () _____

Email Address: _____

Are you an enrolled member of a tribe?

☐ No ☐ Yes: Name of tribe(s): _____

If you work for a tribe, has that tribe compacted or contracted its Environmental Health services?

Yes ___ No ___ Not sure ___ Not applicable to me ___

Application Checklist: Enclosed are the following:

1. _____ Letter of interest from applicant
2. _____ Applicant's education and job summary (resume)
3. _____ Fellowship project proposal form
4. _____ Proof of Bachelor degree
5. _____ Certificates of Completion (or other similar proof of completion)
 - a. Level I: Introduction to Injury Prevention Core Course, or equivalent
 - b. Level II or III: Intermediate or Advanced Injury Prevention Core Course, or equivalent

Letters of support from:

6. _____ IHS Area Injury Prevention Specialist

7. _____ Supervisor

**Please submit your application via hard copy mail, fax, or preferably email, for receipt by
December 1 to:**

Nancy Bill, MPH, IHS Injury Prevention Program Manager

OEHE-EHS-TMP 610

801 Thompson Ave, Suite 120

Rockville, MD 20852

Phone: 301-443-0105; Fax: 301-443-7538; email: nancy.bill@ihs.gov

